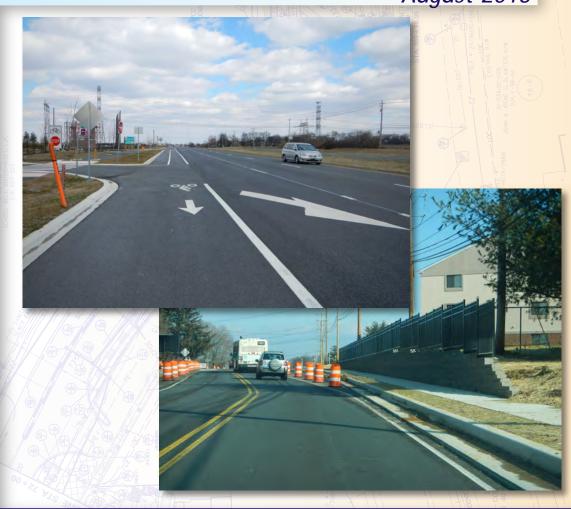


# 2012 CORRIDOR MONITORING AND TRIGGERING REPORT

August 2013











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#### INTRODUCTION

The Route 40 Corridor Improvements Project was initiated by the Delaware Department of Transportation in partnership with New Castle County and WILMAPCO in September 1998. Completion of the first four steps of this project produced a community-supported 20-year transportation plan prepared under the direction of a Steering Committee composed of civic leaders, elected officials, and business interests. Technical support for plan development was provided by a project team, composed of the project partners' staffs and their planning and engineering consultants. The Route 40 Corridor 20-Year Transportation Plan (the Plan) was adopted on June 19, 2000.

The Plan addresses the conditions that are expected to result from projected growth in housing, employment, and traffic over 20 years. The Plan contains projects, separated into three phases (Phase I 2000-2007, Phase II 2008-2013, Phase III 2014-2020), that address projected transportation problems. By phasing projects over 20 years and using a monitoring and triggering mechanism, projects will be built only as conditions dictate, addressing one of the main goals of the Steering Committee.

The fifth and final step of the project, the implementation of the Plan recommendations, is now in its thirteenth year. This thirteenth annual Corridor Monitoring and Triggering Report is an essential component of this step. To assure that all projects in the Plan are implemented as conditions dictate—neither prior to the anticipated need, nor subject to unnecessary delay after need is identified—the Plan included an implementation strategy consisting of five components:

- Corridor preservation
- Monitoring
- Triggering
- Citizen involvement
- Project implementation

Citizen involvement is accomplished through a Corridor Monitoring Committee (CMC). Until 2008, this committee typically met three or four times each year with the project team to review conditions in the corridor, which the project team monitored throughout the year. The CMC met in May of 2012 and will likely continue to meet once a year.

The monitoring efforts, which are summarized in this report, consider:

- Land development
- Traffic
- Corridor preservation

- Highway safety
- Transit service
- Project status
- Impact of completed projects
- Other projects in the region

Each of these factors is discussed in the following sections. The project team's assessment of these monitored conditions forms the basis for the triggering section of the report. Examples of triggering, as defined in the Plan, are listed below.

- Major land development activity would trigger immediate review of transportation needs: level of service implications and strategy, transit service needs or opportunities, safety concerns, and pedestrian and bicycle needs.
- Steady deterioration in level of service to D or worse would trigger a response in the form of strategies to stabilize/reduce demand (i.e. travel demand management measures or transit improvements) or increase multimodal capacity.
- Safety improvements recommended by the Hazard Elimination Program (HEP), a component of the Highway Safety Improvement Program, would trigger an evaluation by the project team of the compatibility of the proposed improvements with the Plan and of the need to make adjustments to the Plan.
- Transit service changes proposed by DTC would trigger an evaluation by the project team of any ancillary improvements needed to complement the service changes, such as sidewalks or shelters that should be advanced in the Plan's implementation.
- Transportation improvements that are not part of the Plan but that impact the corridor and are proposed for implementation would trigger an evaluation by the project team. The evaluation would focus on compatibility of the proposed improvements with the Plan and the need to make adjustments to the Plan.

Assessment of these potential changes may trigger one of the following options to best respond to the new conditions:

- Continue with a Plan project or projects as currently scheduled in the WILMAPCO Transportation Improvement Program (TIP) and/or DelDOT Capital Transportation Program (CTP).
- Move a project(s) forward in the TIP/CTP schedule and determine appropriate level of effort for design activities.
- Move a project(s) back into the out years of the TIP/CTP schedule.

#### MONITORING

#### Land Development

#### Site Review Team

Development activity is typically monitored through meetings of the site review team, which consists of representatives from DelDOT, the New Castle County Department of Land Use, and the Delaware Transit Corporation. Since the peak of new development activity in 2003, the number of new applications in the corridor has steadily declined. As a result, the site review team no longer meets regularly. In 2012, DelDOT's Development Coordination Section met twice a month to review development proposals throughout New Castle County. Members of the Route 40 Project Team continue to review plans in the corridor for consistency with and impact to the Plan and provide comments to DelDOT and New Castle County. The team's comments include recommendations in such areas as corridor preservation, access management, and cost-sharing opportunities.

#### **Summary of Development Activity**

During 2012, there were 23 new development plans (3 major / rezoning, 7 minor, and 13 resubdivision / other) submitted to New Castle County for review in the Route 40 corridor. This level of development activity is less than last year and consistent with the reduced number of new applications in recent years. There were two new major plans submitted in 2012, which is one more than the number submitted in 2011. Table 1 provides a description and status of the current major development proposals, as well as other previously-submitted major plans discussed during the year. Major development locations are shown in Figure 1.

Review of 17 major developments proposed before 2012 continued this year. Among those plans, three (Lincoln Center, Belltown Business Center, and Springside Plaza) were recorded during 2012. Among the remaining 14 plans, seven are in the record plan submittal stage, six are in the exploratory submittal plan review stage, and one expired. Additional impacts of some significant developments on the Plan are as follows:

 Construction of a new Royal Farms on the south side of US 40 near Pleasant Valley Road is complete. The proposed development included improvements to the fourth leg of the signalized intersection at US 40 and Pleasant Valley Road.

- The project also included right-of-way dedication and construction of a 10-foot shared use path along the property frontage.
- A development plan for Wellington Commons, a new 51,437 SF shopping center including a CVS, Royal Farms with car wash, and miscellaneous retail on the north side of US 40 near Brookmont Drive, was approved in November 2012. The developer's responsibilities will include the addition of a second left-turn lane along eastbound US 40, an additional left-turn lane along southbound Brookmont Drive, and removal of the left-turn lane along westbound US 40. The project also includes dedication of right-of-way and construction of a 10-foot shared use path along the north side of US 40. Construction is expected to begin in 2013.
- Construction for the next phase of Becks Woods Plaza continued in 2012. This development included a traffic signal agreement for the intersection of US 40 at Becks Woods Drive. The developer is required to pay for its construction, which also includes upgrades to pedestrian and transit facilities. The traffic signal has been installed, but is not yet operational. In addition, a right-turn lane along westbound US 40 at Becks Woods has been installed.
- Wilmington University has completed construction of a 19,931 SF, two-story field house along with an athletic field and associated parking. The project, west of Walther Road, included the construction of a 10-foot shared use path along the north side of US 40, dedication of right-of-way and easements, and developer contributions in lieu of a traffic impact study. The facility is now open for use.
- Community Powered Federal Credit Union constructed a two-story, 10,000 SF building on the south side of US 40 across from Becks Woods Plaza. The project included the addition of a right-turn lane and bike lane along eastbound US 40, as well as a 10-foot shared use path along the south side of US 40.
- The final entrance plans and off-site road improvements for Springside Plaza were approved in 2012. Construction of these improvements including the new traffic signal installation at Biddle Avenue is scheduled to begin in spring 2013.

**Table 1.** Major Development Plans/Rezonings Received and/or Reviewed During 2012

Site	Description	Remarks	New plan in 2012?	
Lincoln Center	508 dwelling units and 761,500 square feet of office, retail, and mixed use buildings; includes a Traffic Mitigation Agreement to reduce peak hour traffic	Recorded	No	
Belltown Business Center	Five office/warehouse buildings with a total of 120,000 square feet, proposed on 33.53 acres	Recorded	No	
Springside Plaza	Eliminate originally proposed vehicular connection between Springside Plaza and Peoples Plaza and dedicate right-of-way; includes a Traffic Mitigation Agreement to reduce peak hour traffic	Recorded	No	
Old State Road Self Storage	Rezone 13.51 acres from S to CR for construction of 48,350 square feet of self-storage units and associated office	Record Submittal	No	
Vista at Red Lion Section One	Rezone from S to ST to construct 286 age restricted townhouse units on 56.71 acres	Preliminary Submittal	No	
Vista at Red Lion Section Two	Rezone from S to ST to construct 289 single family units on 144.88 acres	Preliminary Submittal	No	
French Park	Combine tax parcels to develop the resultant parcel pursuant to the NCPUD zoning, consisting of 372 apartment units and 139 townhouse lots	Preliminary Submittal	No	
Whitewood Village	Create a 209 lot townhouse subdivision	Preliminary Submittal	No	
Reserve at Becks Pond	Reconfigure previously recorded parking areas, open space and amenities			
Meridian Crossing	Resubdivide lots 522, 522A, 242-373 and community open space	Exploratory Submittal	No	
339 Old State Road	Rezone property from S to CR, combine three tax parcels, construct 24,100 square feet of flex warehousing and retail	Exploratory Submittal	No	
La Grange Plaza	Rezone 1.41 acres of S lands to CR and develop site with a 5,625 square foot restaurant, 11,600 square foot retail building and associated improvements	Exploratory Submittal	No	
Governor's Square Commercial Center	Rezone 31.935 acres from OR to CR to construct a 227,995 square foot commercial development	Exploratory Submittal	No	
Nichols/McCoy	Construct connector road and create five new parcels	Exploratory Submittal	No	
Rockwood Parcel 1-A	Remove 20 foot wide sanitary sewer easement and construct 45 apartment buildings with 438 units, 32 parking garages, and all necessary improvements	Exploratory Submittal	No	
Rockwood Parcel 1-C	Construct one apartment building with 90 units, 4 parking garages and other site improvements.	Exploratory Submittal	No	
New Testament Ministries	Construction of a 77,310 SF church facility and three 9,600 SF dormitory style facilities	Exploratory Submittal	Yes	
Pleasant Valley Crossings	Title subdivide parcel into three lots and construct three retail buildings of 20,894 SF	Exploratory Submittal	Yes	
504 Pulaski Hwy Used Car Sales/Auto Repair	Rezone from NC21 to CR and develop site with a one story used car sales/auto repair building and associated site improvements	Exploratory Submittal	No	

#### **Developer Agreements**

Since 2000, there have been more than 400 applications submitted to New Castle County for developments in the Route 40 Corridor. In addition to those previously noted, more than 60 land development projects in the Route 40 Corridor have developer agreements with the State or County regarding transportation improvements in the corridor. These improvements range from sidewalks to widening of roadways, signal agreements and significant right-of-way dedication. New Castle County continues to work with DelDOT on a comprehensive tracking system for these agreements, which is used to coordinate private and DelDOTsponsored roadway improvements. Developer contributions throughout the corridor are highlighted in Figure 2.

Any proposed development requiring a Level of Service (LOS) waiver from New Castle County, must first have a Traffic Mitigation Agreement (TMA) negotiated with DelDOT. TMAs were implemented to provide an alternative for developers to reduce trip generation and provide transportation demand management measures. Developers are required to present primary and contingent trip reduction measures that could include alternative work hours, preferential parking for carpools/vanpools, bicycle storage, and parking management. There are four developments in the Route 40 Corridor that have a TMA with DelDOT, Lincoln Center, Springside Plaza, Astra Zeneca, and Gore.

#### TIS Waivers / Fair Share Contributions

In 2004, New Castle County amended its Unified Development Code (UDC) regarding Traffic Impact Study (TIS) Waivers. The UDC already enabled such waivers for developments where TISs had been done for changes in zoning. The modification allowed TIS Waivers for developments Transportation Improvement Districts (TIDs) or similarly defined areas where sufficient prior traffic studies have been done. Although Delaware currently has no official TIDs, the Route 40 Corridor has many characteristics of one. A TIS Waiver involving a TID uses the adopted Regional Transportation Plan, rather than a TIS, to determine what transportation improvements should be the developer's responsibility. The developer is still required to perform a Traffic Operational Analysis (TOA) to demonstrate DelDOT and County Level of Service (LOS) concurrency.

Within the Route 40 Corridor, a total of twenty-two development plans have requested a TIS Waiver for location in a TID. By the end of 2012, TIS Waivers had been approved for fifteen of them and two more (Rockwood Parcels 1-A and 1-C) were being processed. Two developments did not require a TIS: Reserve at Becks Pond involved workforce housing, which is exempt from County concurrence, and Lighthouse Baptist Church (where the nearby intersection had been recently improved). DelDOT also denied a TIS Waiver for Governors Square Commercial Center and required a TIS for Whitewood Village. Another development, Whittington Woods, completed a TIS instead of completing the waiver process.

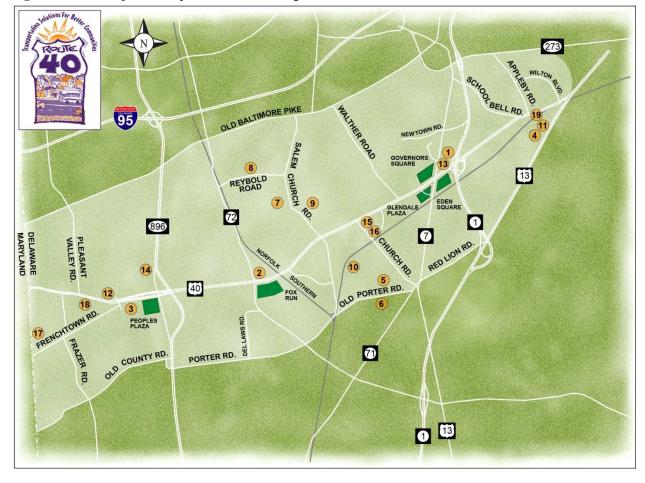


Figure 1. Active Major Development Plans/Rezonings

- 1. Lincoln Center
- 2. Belltown Business Center
- 3. Springside Plaza
- 4. Old State Road Self Storage
- 5. Vista at Red Lion Section One
- 6. Vista at Red Lion Section Two
- 7. French Park
- 8. Whitewood Village
- 9. Reserve at Becks Pond
- 10. Meridian Crossing

- 11. 339 Old State Road
- 12. La Grange Plaza
- 13. Governors Square Commercial Center
- 14. Nichols/McCoy
- 15. Rockwood Parcel 1-A
- 16. Rockwood Parcel 1-C
- 17. New Testament Ministries
- 18. Pleasant Valley Crossings
- 19. 504 Pulaski Highway

Figure 2. Developer Contributions

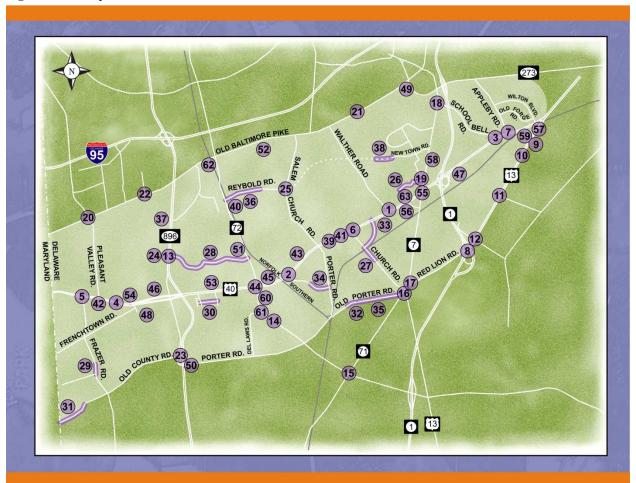


Figure 2. Developer Contributions (cont.)

KEY	INTERSECTION / ROAD	DEVELOPMENTS
1	US 40/Walther Road	Meridian Crossing, Village of Fox Meadow, Glennwood Station, Rockwood Apartments, Governors Square II, River Walk, Barrett Run, Governors Fie Wilmington University, Elizabeth Plaza
2	US 40/Scotland Drive	St. Andrews, St. Andrews Addition
	US 40/School Bell Road	Wal-Mart, School Bell Crossing Shopping Center
	US 40/Perch Creek Drive	Kohl's, LaGrange
	US 40/Frazer Road	St. Margaret of Scotland, Meritage
	US 40/Church Road/Wellington Drive	Meridian Crossing, Rockwood Parcel 1-A, 1-C (US 40 Widening)
7	US 40/Appleby Road	Wal-Mart, Dover Federal Credit Union
	US 13/SR 71	Red Lion Mini-Storage
		Mallard Pointe
A PROPERTY.	US 13/Saienni Boulevard/Mallard Road	Mallard Pointe, Bayview Manor II, Chaddwyck, Jillians Way
		Chaddwyck
	US 13/Bear-Tybouts Road/Hamburg Road	Blue Diamond Recreation Park, Chaddwyck
13	SR 896/Corporate Boulevard/GBC Drive	Glasgow Business Community; Parcel 2C-2, Pencader Corp. Center Parcel 32, Parcel 33 and Gore
14	SR 72/Mabel Lane	Caravel Academy
15	SR 71/SR 72	Willow Oak Farms, Red Lion Chase, Sunset Meadows, Red Lion Christiar Academy, Sunset Run, Village of Red Lion Creek, Estates of Red Lion, Jester Crossing, Peoples Industrial Park
16	SR 71/Church Road	Meridian Crossing, Wellington Commons, Elizabeth Plaza
	SR 7/SR 71	Love of Christ Church, Corbitt Estates, Estates of Red Lion, Peoples Industrial Park
	SR 7/School Bell Road	School Bell Apartments
	Songsmith Drive/Governors Square access	Calvarese Farms, Governors Square Commercial
_	Old Baltimore Pike/Otts Chapel Road/Pleasant Valley Road	Deerborne Woods, Lighthouse Baptist Church
21	Old Baltimore Pike/Martha Washington Boulevard/Norwegian Woods Drive	Norwegian Woods, Hershberger Apartments
	Old Baltimore Pike/Iron Hill Road Glasgow Avenue/Old County Road	Preserve at Lafayette Hill
	Corporate Boulevard/Executive Drive	Meritage Pencader Corporate Center; Parcel 30A
	Salem Church Road/Reybold Road	AstraZeneca, Whitewood Village
	Carvel Drive traffic calming	Calvarese Farms
	Church Road	Rockwood Apartments (frontage), Meridian Crossing (frontage)
	GBC Drive (Dusk Run Road), SR 896 to SR 72	Gore
29	Frazer Road	Meritage (frontage shoulder)
30	US 40 LaGrange Ave.	YMCA, Delaware State Police, Bristol Place
	Old County Road	Estates at Long Branch (frontage, extending west to Maryland border)
	Old Porter Road curve realignment	Meridian Crossing
	Rockwood Drive	Rockwood Apartments
	Scotland Drive extension, St. Andrews Road to Porter Road Old Porter Road	St. Andrews Addition  Vista at Red Lion
	Reybold Road	Whitewood Village
	Route 896/Old Coochs Bridge Road/Four Seasons Parkway	Thirteen Stars Housing and Gore
	Newtown Trail	Whittington Woods
$\overline{}$	US 40/Glasgow Drive	Salem Center
	SR 72/Reybold Road	Whitewood Village
	US 40/Brookmont Drive	Wellington Commons
42	US 40/Pleasant Valley Road	Pleasant Valley Crossing, Royal Farms
	US 40/Becks Woods Drive	Becks Woods Plaza, St. Andrews Addition
	US 40/SR 72	Fox Run Shopping Center, Belltown Business Center
	US 40/PGA Blvd	Belltown Business Center
	US 40/Peoples Plaza US 40/Buckley Blvd	LaGrange Americinn, Goodyear, Gordon Furniture
	US 40/Biddle Avenue	Springside Plaza
	Old Baltimore Pike/SR 273	Comfort Suites, Promenade at Christiana
	SR 896/Porter Road	Gore
	SR 72/GBC Drive	Gore
52	Old Baltimore Pike/Hanna Drive	Astra Zeneca
53	US 40/LaGrange Avenue/Glasgow Park	YMCA, Delaware State Police, New Castle County
	US 40/N392A	Deer Park Plaza
	US 40/SR 7	Governors Square Commercial
	SR 7/Glendale Connector/Old Hamburg Road	Governors Square Commercial
	US 13/Langollen Blvd	Old State Road Hotel, Old State Road Self Storage
	SR 7/Songsmith Drive South Old State Road	Governors Square Commercial, Lincoln Center  Old State Road Hotel, Old State Road Self Storage
	SR 72/Rue Madora	Fox Run Business Center
	SR 72/Del Laws Road	Fox Run Business Center
011		

#### **Traffic**

To monitor traffic growth, full-day traffic counts were conducted on five segments of Route 40 using automatic tube counters. These segment counts were used to monitor overall trends, as opposed to intersection counts, which were used to measure levels of service. The segment counts were compared with the traffic information utilized during development of the Plan, which was based on counts conducted primarily in 1998 and 1999, as well as counts conducted for Corridor Monitoring and Triggering Reports during 2000 through 2012. Average daily traffic (ADT) volumes along Route 40 are summarized in Table 2.

The Route 40 Plan anticipated that at the five locations shown in Table 2, traffic would increase by an average of about 1.8 percent per year through 2020. Current data indicate growth rates less than what was originally anticipated (See Figure 3). The volumes at these five locations are summarized in Table 2. All of the locations experienced less traffic than predicted, ranging from more than 5 to almost 22 percent below the 2012 projections. As a result, the general growth trend through 2012 is about 1.0 percent annually.

To compare current levels of service for intersections along US 40 to the levels of service used during the Plan development process, the project team conducted intersection counts during weekday peak hours at all signalized intersections on US 40 in November 2012. Unsignalized intersections were not counted because no improvements are included at these intersections in the Plan. It is assumed that any future signalization of these intersections, whether required due to land development or traffic growth, will have to meet intersection signalization warrants as required by DelDOT.

The traffic volumes collected at the signalized intersections were analyzed in a manner consistent with the traffic impact study process used by New Castle County and DelDOT. The results of the level of service (LOS) analysis are summarized in Table 3. As indicated, six intersections had minor degradation in levels of service from 2011 and four experienced slight improvements.

- The intersection of US 40 and Frazer Road remained at LOS B in the AM peak for the third consecutive year and decreased to LOS C in the PM peak for the first time.
- The intersection of US 40 and Peoples Plaza south returned to LOS B in the AM peak for the first time since decreasing to a LOS C in 2006 and remained at LOS C in the PM peak.
- The intersection of US 40 and Glasgow Avenue north improved to LOS C in the AM peak after two consecutive years of LOS D and remained at LOS D in the PM peak.
- The intersection of US 40 and Glasgow Avenue south remained at LOS D in the AM peak for the third consecutive year and decreased to LOS D in the PM peak for the first time.
- The intersection of US 40 and Lagrange Avenue remained at LOS C in the AM peak for the second consecutive year and decreased to LOS D in the PM peak for the first time.
- The intersection of US 40 and Salem Church/Porter Road remained at LOS D in the AM peak and returned to LOS E in the PM peak after two consecutive years of improvement to LOS D. At this intersection there was an approximately twenty percent increase in eastbound and northbound through traffic and forty percent increase in eastbound and southbound left-turning traffic compared to 2011 counts, which may have contributed to the LOS decrease.
- The intersection of US 40 and Glasgow Drive returned to LOS A in the AM peak after dropping to LOS B in 2011 and remained at LOS B in the PM peak for the third consecutive year.
- The intersection of US 40 and Brookmont Drive remained at LOS A in the AM peak for the fifth consecutive year and increased to LOS A in the PM peak for the first time.
- The intersection of US 40 and Walther Road decreased to LOS D in the AM peak after six

- consecutive years at LOS C and remained at LOS D in the PM peak for the third consecutive year.
- The intersection of US 40 and US 13 remained at LOS B in the AM peak for the fifth consecutive year and decreased to LOS D in the PM peak.
- All other signalized intersections on US 40 operated at acceptable levels of service (D or better) during both peak hours.

Levels of service at selected intersections over the course of the Route 40 planning process are illustrated in Figure 4.

Table 2. Average Daily Traffic

Location	Plan volumes (1998/1999)	2000 counts	2011 counts	Projected 2012 volumes	Actual 2012 volumes	Percentage over (under) projected	2020 forecast
East of Perch Creek Drive	34,000	29,000	35,813	42,909	37,924	-11.6%	48,000
West of SR 72	29,000	27,000	31,532	42,364	33,101	-21.9%	50,000
West of Salem Church Road	32,000	34,000	35,988	44,727	36,682	-18.0%	52,000
West of Walther Road	41,000	43,000	43,435	51,818	43,087	-16.8%	58,000
West of Wilton Boulevard	27,000	27,000	26,668	30,818	29,087	-5.6%	33,000

Figure 3. Traffic Growth Along US 40 (average of five count locations)

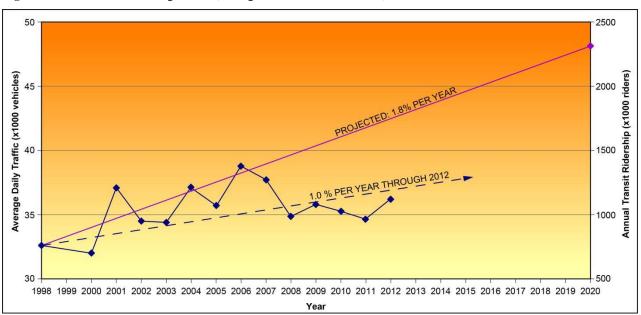


Table 3. Signalized Intersection Level of Service Summary

	PEAK HOUR LEVEL OF SERVICE											
INTERSECTION		Base Year (1998/1999)		2000		2011		2012		2020 without additional Plan improvements <sup>4</sup>		
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
Frazer Road <sup>1</sup>	-	-	-	-	В	В	В	©	F	С		
Pleasant Valley Road <sup>5</sup>	С	С	С	С	С	С	С	С	E	F		
Perch Creek Drive <sup>2</sup>	-	-	В	Α	В	В	В	В	С	С		
Peoples Plaza north	В	С	Α	В	Α	Α	Α	Α	Α	Α		
Peoples Plaza south	В	В	В	С	С	С	B	С	С	D		
Glasgow Avenue north	С	С	С	С	D	D	©	D	С	Е		
Glasgow Avenue south	С	D	В	С	D	С	D	(D)	D	D		
SR 896	D	D	D	E	D	D	D	D	F	F		
Lagrange Avenue	-	-	-	-	С	С	С	0	В	С		
SR 72	D	D	E	E	D	D	D	D	E	Е		
Scotland Drive	С	В	В	В	В	С	В	С	С	С		
Salem Church/Porter Road	С	С	D	D	D	D	D	(E)	D	F		
Glasgow Drive <sup>3</sup>	-	-	-	-	В	В	A	В	-	-		
Brookmont Drive	В	В	В	В	Α	В	Α	A	В	В		
Church Road	D	С	D	С	С	С	С	С	С	С		
Walther Road	С	D	D	D	С	D	0	D	С	С		
Governors Square	В	С	С	С	С	D	С	D	С	D		
SR 7/Eden Square	E	D	E	D	С	С	С	С	D	E		
SR 1 SB Ramps	Α	Α	Α	Α	Α	Α	Α	Α	В	С		
SR 1 NB Ramps	В	В	В	Α	Α	Α	Α	Α	E	С		
Buckley Boulevard	-	-	В	В	В	С	В	С	В	С		
School Bell Road	В	В	С	Α	Α	Α	Α	Α	Α	Α		
Wilton Boulevard	В	В	С	С	В	С	В	С	В	С		
US 13	D	В	С	В	В	С	В	(D)	F	F		

Note: Red denotes a worse level of service than 2011; green denotes improvement in level of service over 2011.

1 A traffic signal was installed at US 40 and Frazer Road in 2004.

2 A fourth leg (north) was constructed in 2011 as part of the LaGrange Development.

3 A traffic signal was installed at US 40 and Glasgow Drive in November 2009.

4 2020 traffic projections were updated in 2009. The projected LOS includes implemented projects through the end of 2012.

<sup>&</sup>lt;sup>5</sup> Entrance to Royal Farms (south leg) was completed in 2012.

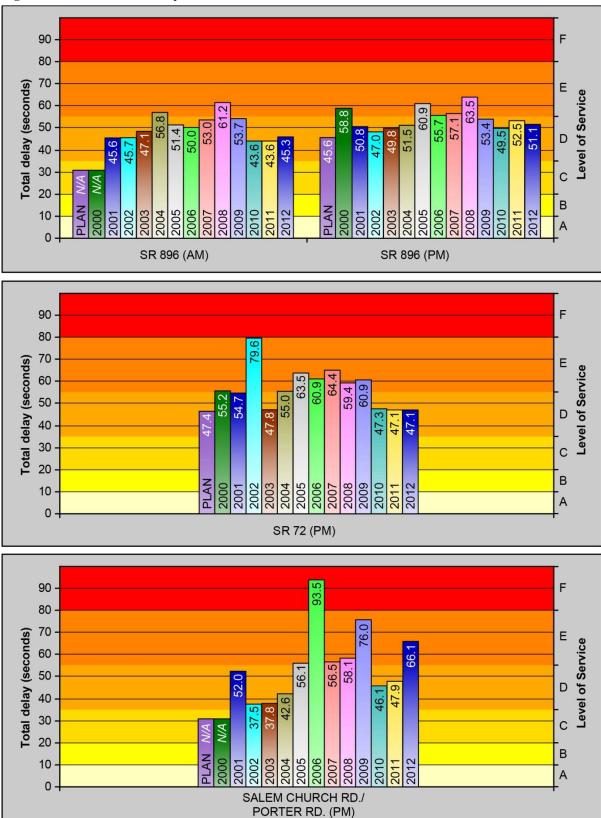


Figure 4. Level of Service Comparison at Selected Intersections

To assess the validity of the plan beyond its original horizon year of 2020, an analysis of projected 2030 traffic volumes was conducted in 2009. DelDOT's travel demand model was used to forecast traffic along Route 40 and side streets. These future daily volumes were converted to peak hour turning movement forecasts. A level of service analysis was then conducted to determine how well the improvements in the Plan will perform in 2030.

Due to lower than expected traffic growth, most of the improvements proposed in the Plan will not only continue to work in 2020, but will accommodate forecast 2030 traffic as well. Plan improvements at the following locations are expected to be sufficient for 2030 traffic:

- US 13 interchange (to replace an existing signal)
- · Wilton Boulevard
- · School Bell Road
- · Buckley Boulevard
- SR 1 interchange
- SR 7 interchange (to replace existing signals at SR 7, Eden Square, and the Governors Square/Glendale Plaza entrance)
- Walther Road
- · Church Road
- Brookmont Drive
- Glasgow Drive
- Scotland Drive
- SR 72
- Lagrange Avenue/Glasgow Park
- SR 896 interchange (to replace an existing signal)
- Peoples Plaza (two intersections)
- Perch Creek Drive

There are some locations where, due to changes in traffic patterns, Plan improvements are not forecast to be sufficient to address anticipated traffic in 2030. These locations include the following.

- Salem Church Road/Porter Road: Due to higher side street volumes than originally anticipated in the Plan, Route 40 may need to be widened to four through lanes in each direction, rather than the three noted in the Plan, to maintain level of service D. However, the intersection will barely drop below level of service D with three through lanes in each direction.
- Glasgow Avenue (two intersections): Due to higher volumes than originally anticipated in the Plan, Route 40 may need to be widened to three

through lanes in each direction to maintain level of service D. The Aikens Tavern historic district abuts three corners of the intersection, making widening along the existing alignment challenging. Alternative solutions to reduce or accommodate future traffic demand must be considered.

- Pleasant Valley Road: Due to higher volumes than originally anticipated in the Plan, as well as the addition of a south leg to the intersection, Route 40 may need to be widened to three through lanes in each direction to maintain level of service D. An additional eastbound left turn lane may also be needed by 2030.
- **Frazer Road:** Due to higher volumes than originally anticipated in the Plan, Route 40 may need to be widened to three <u>eastbound</u> through lanes to maintain level of service D.

Because most of the additional improvements needed by 2030 are in the portion of the corridor west of SR 896, strategies to reduce travel demand should be considered either in addition to or in lieu of roadway widening. Transit could also play an increased role in addressing future traffic congestion challenges in this area

# Highway Safety Review of Conditions in 2012

The goal of this report with respect to safety is to determine those intersections where crash rates increased significantly (>50%) compared to the previous five-year average, identify the reasons for those increases, and consider those sites for detailed study and improvement recommendations. To determine priorities for potential safety improvements, crash summary data was analyzed at signalized intersections in the Route 40 corridor.

Table 4 shows the number of reported crashes annually at selected intersections from 2008-2012. The 2012 crash totals were compared to the previous five year average to determine if there was an increase of greater than 50 percent. It is important to note that these totals are approximated based on raw crash data summaries and not the actual reports. The number of crashes is determined based on the DelDOT mile posts at a particular intersection along US 40 and includes all crashes listed within 0.10 miles of the intersection. These numbers may vary upon review of the detailed crash reports.

Upon reviewing the crash data, there are three intersections where the 2012 reported crash total is

more than 50 percent higher than the previous five year average. The highest crash total (28) among those intersections was at Church Road. Based on the reported crash totals for 2012, detailed crash reports will be requested and reviewed at the following intersections to determine potential crash patterns:

- Route 40 at Glasgow Drive
- Route 40 at Church Road
- Route 40 at SR 1 SB

After reviewing the crash data, any crash patterns identified will be evaluated to determine the need for further study.

#### Pedestrian and Bicycle Safety

In 2012, the project team also conducted a review of all crashes involving pedestrian and cyclists along Route 40 from the Maryland/Delaware state line to the intersection at US 13. During 2012, a total of nine reported crashes involved pedestrians and three involved bicycles. Eight of the nine pedestrian crashes resulted in personal injuries, two of which were fatal, and two of the three bicycle crashes resulted in personal injuries. Both of the fatal pedestrian crashes resulted from pedestrians crossing US 40 at unmarked locations at night. Two other pedestrian crashes also involved a pedestrian who was crossing at an unmarked location, one of which occurred at night. Two pedestrian crashes occurred along Route 40 between Rosetree Lane and Frazer Road where there are no existing pedestrian facilities. Two of the bicycle crashes occurred during dark-lit conditions at Wellington Drive; however, the cyclists were both cited for not using proper equipment at night.

#### **Previous Safety Studies**

Based on the reported crash totals for 2011, detailed crash reports were requested and reviewed at the following intersections.

• Route 40 at Pleasant Valley Road – A total of 20 crashes were reported between October 2010 and September 2011, including eighteen (90 percent) rear end crashes, one angle crash and one fixed object crash. Four crashes resulted in injuries. Five crashes occurred on Pleasant Valley Road and fifteen crashes occurred on Route 40. No significant crash patterns were identified in the reports, such as time of day, direction of travel or day of week. There are signal ahead warning signs along both Route 40 approaches and no signal visibility issues were

observed. No additional studies are recommended.

Route 40 at Glasgow Drive - A total of 21 crashes were reported between October 2010 and September 2011, including eighteen (86 percent) rear end crashes. Five crashes resulted in injuries. A total of 6 southbound leftturn/westbound through angle crashes were reported between January 2011 and December 2011. All of these crashes involved a westbound vehicle disregarding a red signal and two included sun glare as a contributing factor. Field observations confirmed sun glare as being present throughout portions of the Route 40 corridor. During field observations it was noted that the phase for the south leg of the intersection is often skipped due to no traffic volume. This would account for the higher percentage of angle crashes involving southbound vehicles. The existing signal timing was also checked in the signal controller to confirm there are no coordination issues that might contribute to the number of westbound vehicles disregarding the red signal. There are signal warning signs and no signal visibility issues along both Route 40 approaches. No additional studies are recommended at this time; however, 2012 crash reports were also requested. A review of those reports indicated that there were a total of 15 reported crashes in 2012 and one southbound/westbound angle crash.

#### **Hazard Elimination Program Sites**

DelDOT's statewide Highway Safety Improvement Program (HSIP) includes several categories of transportation safety throughout the state. One of those categories is the Hazard Elimination Program (HEP), which involves reviewing statewide crash rates and selecting 30 sites for study.

The following sites within the corridor were part of DelDOT's statewide 2010 and 2011 HEP; no 2012 HEP sites were within the US 40 corridor. Crash rates were based on events that took place during the three preceding calendar years (e.g. 2008 - 2010 for the 2011 HEP). The recommendations from the HEP review team and status of implementation are summarized below:

- 2010 Site E Porter Road/Salem Church Road from south of Route 40 to north of Bradley Drive.
  - The HEP committee recommended modified signal timings to reduce delay and extending

- the eastbound Route 40 left turn lane to accommodate peak hour queue lengths. The left-turn lane extension has not been implemented, but signing and striping improvements have begun.
- 2010 Site K US 40/Pulaski Highway from east of Glendale Boulevard to east of Robin Drive North.
  - o Construction of pedestrian improvements at the intersection of US 40 and Buckley Boulevard has begun. Backplates have been installed eastbound and westbound along US 40 at the Route 1 South intersection. Signal phase and timing changes were completed at the intersection of Route 40 and Eden Square in October 2012. Additional improvements are being considered for implementation by DelDOT.
- 2010 Site V Porter Road from US 301/SR 896 to east of Jayson Drive.
  - o The HEP committee recommended the installation of concurrent, protected-only lag left-turn phasing on the eastbound and westbound approaches at the SR 896 at Glasgow Avenue/Porter Road intersection and removing the channelizing portion of the concrete median on the east leg of the intersection in order to increase capacity and reduce the potential for through queues blocking access to the adjacent left-turn lane. Replacing the eastbound Glasgow Avenue acceleration lane with a combination acceleration/deceleration auxiliary lane along southbound SR 896 between Glasgow Avenue/Porter Road and the Glasgow Reformed Presbyterian Church entrance and installing longitudinal rumple strips along SR 896 from US 40 to the Summit Bridge were also recommended to reduce potential crashes. These improvements are being considered for implementation by DelDOT.
- 2011 Site T Old Baltimore Pike from west of Winterview Way to west of Westover Woods Drive.
  - Installation of backplates for the northbound and southbound SR 896 signal heads has been approved and is expected to be completed by spring 2013.
  - A project nomination form has been submitted to establish a capital project at Site T.
     Proposed improvements include extending the

- median on the east leg of SR 72 at Old Baltimore Pike to prohibit eastbound Old Baltimore Pike left-turns at the Royal Farms driveway, installing a median for westbound Old Baltimore Pike left turns at Word of Life Christian Center, constructing a channelized left-turn lane on southbound SR 72 at the Royal Farms driveway, modifying the Royal Farms entrance on SR 72 to accommodate truck turning movements, constructing a second eastbound left-turn lane on Old Baltimore Pike at SR 72 with protected-only lead left-turn phasing, installing protected-only lag left-turn phasing on westbound Old Baltimore Pike at SR 72 (and installing signalized crosswalks and ADA curb ramps at the intersection), and installing railroad preemption at SR 72 and Old Baltimore Pike.
- 2011 Site V US 40/Pulaski Highway from east of Frenchtown Manor Road to east of US 301/SR 896.
  - o A project nomination form has been submitted to establish a capital project at Site V. Proposed improvements include widening the north leg of Glasgow Avenue at US 40 to provide two southbound through lanes, widening the south leg of Glasgow Avenue at US 40 to provide two northbound through lanes, and installing a channelizing island for right-turning vehicles on northbound Glasgow Avenue at US 40. Short term improvements include the installation of split phasing on northbound and southbound Glasgow Avenue at US 40, restriping the northbound Glasgow Avenue "median" as a shared left-turn/through lane, and pavement marking improvements to discourage eastbound US 40 vehicles from continuing through the intersection from the eastbound right-turn lane.
- 2011 Site W US 40/Pulaski Highway at SR 72.
  - DelDOT plans to install an additional red light enforcement camera to monitor the westbound US 40 through movement at SR 72 as part of the Electronic Red Light Safety Program (ERLSP) retrofit project.
  - Site W is one of two active projects within the Route 40 corridor. Refer to the Project Status section of this report for further details.

Table 4. Intersection Crash Data Summary

INTERSECTION	NUMBER OF REPORTED CRASHES								
INTERSECTION	2008	2009	2010	2011	2012				
Frazer Road	4	2	10	9	7				
Pleasant Valley Road	11	9	14	20	17				
Perch Creek Drive <sup>1</sup>	7	12	10	12	8				
Peoples Plaza <sup>2</sup>	5	8	6	8	7				
Glasgow Avenue <sup>2</sup>	17	21	30	29	29				
SR 896 <sup>2</sup>	30	27	37	28	38				
LaGrange Avenue	4	2	12	10	6				
SR 72 <sup>2</sup>	24	24	37	34	34				
Scotland Drive	27	24	30	21	21				
Salem Church/Porter Road	28	38	36	29	31				
Glasgow Drive <sup>3</sup>	5	6	10	21	15				
Brookmont Drive	18	11	11	12	5				
Church Road	12	15	21	14	28				
Walther Road	18	20	31	20	19				
SR 7	40	44	45	44	56				
SR 1 SB	6	6	9	7	11				
SR 1 NB	8	2	5	7	6				
Buckley Boulevard	5	11	6	9	9				
School Bell Road	4	5	1	6	3				
Wilton Boulevard	16	13	22	12	10				

<sup>&</sup>lt;sup>1</sup>A fourth leg (north) was constructed in 2010 as part of the LaGrange Development. <sup>2</sup>This intersection was studied as part of the 2011 HEP. <sup>3</sup>A traffic signal was installed at Route 40 and Glasgow Drive in November 2009.

#### Transit - Fixed Route Bus Service

At the time of this report, transit ridership numbers were only available through June of 2012. Comparing the first six months of 2012 with those of 2011, statewide ridership and ridership in the US 40 corridor both increased approximately six percent. In the previous year, statewide and US 40 corridor ridership numbers increased approximately seven and a half percent and eleven percent, respectively.

Since the inception of the Route 40 Plan in 2000, statewide ridership has increased 29 percent through 2011 and continued to increase during the first half of 2012. Ridership in the Route 40 corridor also continued to grow in 2012 after approximately 55 percent growth between 2000 and 2011.

Five of the six routes in the corridor saw an increase in ridership numbers in 2012, while one experienced a decrease. After increasing 4 percent in 2011, ridership on route 42 decreased approximately 16 percent in 2012. Ridership on route 41 increased almost 24 percent in 2012 after a decrease of about 22 percent in 2011. Ridership on route 55 increased approximately 7 percent, while the other routes in the corridor saw increases in ridership between about 1 and 6.5 percent. See Figure 5 for route locations.

There were no service changes in the corridor in 2012 and none are currently planned for 2013.

In addition to the DART bus service, Cecil Transit provides bus service along two fixed routes in the Route 40 Corridor. "The Bus" provides service from Elkton, MD to Peoples Plaza along the "Glasgow Connection" and from Perryville, MD to the DE State line along the "Perryville Connection."

Figure 5. Transit Route Map



# Project Status Plan Projects

During 2012, there were two active projects in the corridor that were part of the original Plan: SR 7, Newtown Road to SR 273 and US 40 at SR 72. Figure 6 shows the status of Plan projects in the corridor as of the end of 2012. Detailed descriptions of all active projects are provided below.

#### SR 7, Newtown Road to SR 273

Final design was completed and construction began for the widening of SR 7 to four lanes between Newtown Road and SR 273. These improvements will extend the widening between US 40 and Newtown Road, which was completed in 2006. The project includes sidewalks, bike lanes, and significant improvements at the School Bell Road intersection. Right-of-way acquisition began in 2009, utility relocation began in 2010, final design was completed in 2011, and construction began in spring 2012. Construction is expected to be complete by early 2014.

#### US 40 at SR 72

This project includes the addition of lanes along northbound and southbound SR 72 to provide adequate storage and taper lengths and the addition of left-turn lanes along eastbound and westbound US 40. Del Laws Road will be realigned to reduce the existing skew and align it with the proposed access to the Fox Run Business Center; a traffic signal will be installed at that intersection. Pedestrian and bicycle facilities will also be constructed. Final design continued, but right of way and construction funding has not been allocated.

#### **Eden Square Connector**

A connection will be provided from SR 7 opposite the Glendale Connector to the rear of the Eden Square Shopping Center. This project will allow elimination of the left turn from Eden Square onto US 40, which is expected to improve traffic operations in the area. The project will include slight widening of the Glendale Connector, installation of a traffic signal at the SR 7 intersection, and reconfiguration of the access to the Eden Support Services Center (the former Leasure School). Some modifications to the construction plans completed in 2011 to meet current DelDOT plan development standards. A schedule for advertisement and construction has not been

established for this project. It is anticipated that the project will be 100% state funded.

#### Other Projects in the Corridor

#### SR 71, Old Porter Road to SR 7

This project was originally identified as part of the 2008 HEP and includes some components of the Old Porter Road improvements in the Route 40 Plan. This project proposes to install a traffic signal at SR 71 and Old Porter Road; convert Church Road to one-way eastbound east of the residential driveway east of SR 71; widen the intersection of SR 7 and SR 71 to provide separate left-turn, through and right-turn lanes on the northbound and southbound SR 7 approaches and the southbound SR 71 approach. Protected-only left-turn phasing will also be provided on all four approaches at SR 71 and SR 7.

Semi-final plans will be complete in spring 2013, but construction funding has not been allocated.

#### US 40 and SR 7 Pedestrian Improvements

This project was originally identified as part of the 2010 HEP due to the lack of pedestrian accommodations at US 40 and SR 7. The proposed improvements include installing signalized pedestrian crossings at the north and south legs of the intersection; construct sidewalk connections along both sides of SR 7 from US 40 to south of Songsmith Drive, along the south side of US 40 from SR 7 to west of Wawa, and along the north side of US 40 from SR 7 to Governors Square Shopping Center.

The project is in preliminary design, but the design and construction schedule has not been finalized.

#### SR 896 and Porter Road Intersection Improvements

This project was originally identified as part of the 2010 HEP. The proposed improvements include removing the existing concrete median on the east leg and restriping the westbound Porter Road approach to increase the left-turn lane storage; widening along the west side of SR 896 to increase the length of the southbound acceleration lane for the eastbound right turn; widening into the median to increase the storage length of the northbound SR 896 left-turn lane.

Preliminary plans were submitted in September 2012, but the remaining design and construction schedules have not been established.

#### SR 72 at Old Baltimore Pike

This project was originally identified as part of the 2011 HEP. The proposed improvements include restricting eastbound left-turns from Old Baltimore Pike into Royal Farms and signal modifications at SR 72. To improve eastbound left-turn capacity at SR 72, a double left-turn lane with eastbound lead/westbound lag left-turn phasing is also proposed.

The project is in preliminary design, but the design and construction schedule has not been finalized.

#### Old Baltimore Pike at Salem Church Road

This project was originally identified as part of the 2009 HEP. The proposed improvements include removing existing concrete medians and restriping Old Baltimore Pike to provide double left-turn lanes at the approaches to Salem Church Road (east) / Salem Woods Drive and Salem Church Road (west).

The project is in preliminary design, but the design and construction schedule has not been finalized.

#### **Pavement Rehabilitation**

As part of the statewide pavement rehabilitation program, there is a potential project that would include pavement rehabilitation along US 40 from the Maryland state line to SR 72. This contract is scheduled to begin construction in April 2013.

#### Route 40 Median Landscaping

A project to upgrade median landscaping at multiple locations in the Route 40 Corridor was completed in 2012. The project, which was designed by the Delaware Center for Horticulture and funded by local legislators, included the installation of new landscaping at SR 896, SR 72, and Scotland Drive.

#### Other Projects in the Region

As noted in previous Corridor Monitoring and Triggering Reports, future regional projects may have an impact on the Route 40 corridor. The status of these projects is summarized below.

- I-95/SR 1 interchange improvements:

  Construction of major interchange improvements, including two-lane ramps connecting the north leg of I-95 with the south leg of SR 1, began in 2011 and is scheduled to be complete in 2014.
- SR 1 widening, Roth Bridge to SR 273: Planning has begun for widening (from four to six lanes) and pavement reconstruction along this segment of SR 1. Environmental studies are underway and preliminary design alternatives are being developed. A construction schedule has not been established.
- US 301 Project: The alignment for a new limited-access US 301 from the Maryland state line to the south end of the Roth Bridge was approved by the Federal Highway Administration in April 2008. Final design began in late 2008 and is nearly complete. Construction could begin on certain segments in 2014, depending available funding from proposed toll revenue bonds.
- SR 72, McCoy Road to SR 71: This project proposes to widen SR 72 from two to four lanes between McCoy Road and SR 71. Multimodal improvements, including shoulders to accommodate bicycles and new sidewalks are also planned. Semi-final plans are nearly complete, but a construction schedule has not been established.
- Norfolk Southern Railroad Crossing: Due to an increase in demand for the Delaware City refinery, Norfolk Southern has increased the number and frequency of trains crossing US 40. As a result, Norfolk Southern is constructing improvements along their rail corridor to minimize impact on traffic operations along US 40. Construction is scheduled to begin in August 2013 and will require the closure of Route 40 for about two weeks. A Route 40 overpass at the rail crossing is still part of the original 20-year Plan, but there is currently no funding for design or construction.

Figure 7. Project Status



#### COMPLETE

- Pleasant Valley / Frazer Road Realignment Study
   US 40 / SR 72 Pedestrian Improvements
- Rickey Boulevard Pedestrian Improvements US 40 / Scotland Drive Pedestrian Improvements
- West of Scotland Drive Pedestrian Improvements
   US 40 / Sectland Drive Pedestrian Improvements
   US 40 / Becks Woods Drive Crossover Drainage Improvements
   US 40 / Salem Church Road / Porter Road Pedestrian Improvements
- US 40 / Glasgow Drive Pedestrian Improvements Eden Square Access Improvements
- 9. US 40 / Buckley Boulevard Intersection Improvements
- 10. Old Baltimore Pike Bicycle Lanes
  11. SR 7 / SR 273 Intersection Improvements
  12. US 13 / SR 72 Systems Study, Old Baltimore Pike to St. Georges Bridge
- 13 Rue Madora
- 14. US 40 / Walther Road Intersection Improvements (short term)
- 15. Porter Road, US 40 to SR 7216. Rockwood Road, Church Road to US 40 (by developer)
- 17. Expanded Transit Service (not shown)18. Songsmith Drive Sidewalks
- Waterford Pedestrian Improvements
   Church Road, US 40 to Wynnefield
- Wilton Boulevard / Appleby Road Sidewalks
   Old Porter Road, Porter Road to SR 71 (concept design)
- 23. Old County Road, Frazer Road to Glasgow Avenue (study)
- East Scotland Drive Extension (by developer)
   SR 7, US 40 to Newtown Road

- 26. SR 7 / SR 71 Intersection Improvements (by developer)
- 27. Walther Road Sidewalks/Bike Lanes, north of US 40 to Old Baltimore Pike 28. Bear Area Pedestrian Improvements
- 29. School Bell Road, SR 1 to US 40
- 30. Corridor-Wide Bus Stop Improvements (not shown)

#### **UNDER CONSTRUCTION**

31. SR 7, Newtown Road to SR 273

- 32. Old Porter Road Curve Improvements (by developer)
- 33. US 40 / SR 72 Intersection Improvements

#### **PROJECTS ON HOLD**

- 34. Eden Square Connector (includes improvements to the Glendale Connector) 35. US 40, SR 896 to SR 1, including:

  - US 40 Widening, SR 896 to SR 1 US 40 Sidepaths, SR 896 to SR 1 US 40 SR 896 Interchange US 40 / Norfolk Southern Overpass

  - US 40 / Scotland Drive Intersection Improvements
     US 40 / Salem Church Road / Porter Road Intersection Improvements
  - US 40 / Walther Road Intersection Improvements (long term)
     US 40 / SR 7 Interchange
- US 40 / SR 1 Ramps Intersection Improvements
   US 40 / SR 1 Ramps Intersection Improvements
   US 40 Access Management / Crossover Closures
  36. US 40 / Pleasant Valley Road Intersection Improvements
- 37. Church Road, Wynnefield to SR 71
- 38. US 40 Sidepaths, Maryland State Line to SR 896
- 39. SR 72 Sidewalks, US 40 to SR 71
- 40. Newtown Trail
- 41. Glasgow Avenue "Main Street" Study
  42. Old Baltimore Pike Long-Term Needs Study, SR 72 to SR 273
  43. US 40 Corridor Park-and-Ride Study (not shown)

#### ADDITIONAL PLANNING STUDIES PROPOSED (NOT SHOWN)

- US 13 Corridor Study, SR 1 to Wilmington
- SR 71 Corridor Study, US 13 to SR 896

#### TRIGGERING

## Assessment of Monitored Conditions

Traffic congestion in the corridor did not increase substantially in 2012. Levels of service were acceptable for all intersections except US 40 at Salem Church/Porter Road, which decreased to LOS E for the fourth time since monitoring began. At this intersection there was an approximately twenty percent increase in eastbound and northbound through traffic and forty percent increase in eastbound and southbound left-turning traffic compared to 2011 counts, which may have contributed to the LOS decrease. Thirteen years of traffic data confirm that growth rates are lower than originally anticipated by the Plan, which is consistent with national trends.

During 2012, there were 14 new development plans submitted to New Castle County for review in the Route 40 corridor. This level of development activity is less than last year. A total of 17 major development plans submitted prior to 2012 remained under review. There are several existing and proposed developments with either current developer-funded commitments for roadway improvements or studies underway to determine which development commitments will appropriate.

Safety trends were studied and based upon an updated crash analysis reporting system that was implemented in 2010, causing the crash results to be inconsistent with past study years. The results will continue to be monitored in the future under this new system. There were three sites located within the Route 40 Corridor on the 2011 HEP list, including Old Baltimore Pike, SR 72, and a portion of Route 40 The HEP review team has studied and recommended numerous signing, striping, signal and intersection improvements for each site, some of which have been implemented. Additionally, project nomination forms have been submitted to establish capital projects at two of the 2011 HEP sites, SR 72 at Old Baltimore Pike and US 40 at Glasgow Avenue. Their progress will be monitored. There were no sites located within the Route 40 Corridor on the 2012 HEP list.

Through the first six months of 2012, bus ridership in the Route 40 Corridor is up approximately six percent when compared to the same period in 2011. There were no service changes in the corridor in 2012 and none are currently planned for 2013.

Due to funding constraints all Route 40 projects, except for construction of the SR 7 widening and final design of Route 40 / SR 72 intersection improvements, are currently on hold.

There are no regional highway or transit projects planned that would trigger the need for improvements in the corridor. However, the impact of the I-95/SR 1 interchange construction will be monitored to determine the potential impact to traffic along Route 40

#### Recommendations

#### General

• Continue to identify funding sources to implement as many of the recommendations below as possible and restore projects that have been placed on hold.

#### Land development

- Continue to monitor development activity to ensure compatibility with the Plan and maintain consistent developer contributions to transportation improvements.
- Monitor developer agreements for major land developments to ensure the compatibility of developer-sponsored improvements with the Plan.

#### Corridor preservation

 Continue pursuing corridor preservation opportunities through the site review team process.

#### Highway safety

- Review crash data summary to identify any locations with significant increases in crash rates in 2012.
- Continue to monitor crash reports at US 40 and Glasgow Drive

#### **Transit**

- Continue to track ridership in the corridor and provide service enhancements where appropriate.
- Continue participation in the site review team to identify opportunities for developer-funded transit improvements such as bus service expansion, bus stop improvements, transit oriented development, and innovative trail projects throughout the Route 40 Corridor.

#### Planning, design, and construction

 Continue construction to widen SR 7 between Newtown Road and SR 273.

- Continue final design for the US 40 / SR 72 intersection improvements
- To the extent funding can be made available, establish schedules for the following projects that are on hold:
  - Eden Square Connector (construction)
  - o US 40 / SR 896 interchange (preliminary and final design)
  - o Newtown Trail (final design)
  - o Reybold Road, SR 72 to Salem Church Road (final design)
  - Old Porter Road, Porter Road to SR 71 (final design)
  - o US 40 / Pleasant Valley Road Intersection (concept design)
  - o Church Road, Wynnefield to SR 71 (concept design)
  - US 40 sidepaths, Maryland State Line to SR 896 (concept design)
  - US 40 environmental assessment, SR 896 and SR 1 (concept design)

### PUBLIC INVOLVEMENT

#### Activities During 2012

Public involvement initiatives were limited during 2012 due to funding constraints. There was a virtual public workshop conducted on the Route 40 corridor project website beginning October 8, 2012. The workshop was available online for 30 days. During October and November 2012 there were 287 visits and 554 hits to the Route 40 website.

- A public workshop for the SR 72 widening project from McCoy Road to SR 71 was held on January 23, 2012 from 4 PM to 7 PM at Wilbur Elementary School. There were a total of 38 attendees.
- A public workshop for the SR 71 improvements between Old Porter Road and SR 7 was conducted on November 7, 2012 from 1 PM to 4 PM at Wilbur Elementary School. There were a total of 16 attendees.

The project website, which was reformatted in 2011 to match the current DelDOT standard, is updated annually to provide the latest information on implementation of the Plan. The site contains information from newsletters, updates on project

planning, design, and construction, and a schedule of public meetings and workshops. The site can be accessed from the DelDOT Web site at:

http://www.deldot.gov/information/projects/rt40/index.shtml

#### Activities Planned For 2013

To ensure the community is kept up to date and involved in the progress of transportation improvements in the Route 40 corridor, the project team will continue the following communications initiatives for 2012:

**Website**—The Route 40 corridor project website will continue to be maintained and updated on a regular basis.

**Public workshop**—If funding is in place to make significant progress on Plan implementation in 2013, a summer public workshop will be held, most likely as a virtual public workshop. Interested stakeholders (the CMC, former Route 40 Steering Committee members, elected officials, civic associations and residents on the mailing list) will receive notice of that workshop.

**E-mail, project mailing address and telephone hotline**—Residents will still be able to communicate
with the project team through various channels—
email, mailing address, or telephone.

**KEY:** < N/A > - Not Applicable TBD - To Be Determined

PROJECT COMPLETE
DESIGN COMPLETE - CONSTRUCTION
PROJECT ON HOLD

					Stat	tus	
Se		Actual/	TT 1	Concept	T. C 1		
No. La	Project	scheduled completion	Under study	design complete	In final design	Under construction	Remarks
1	SR 7/SR 273 intersection	2000	study	complete	uesigii	Chaer construction	Kemarks
2	US 40/Walther Road intersection (short term)	2002					
	US 40/Governors Square/Glendale Connector	2002					Part of Eden Square Connector (#13) - Final design complete, project
3	intersection	TBD					on-hold
4	US 40/SR 72 intersection	TBD			X		Final design restarted in 2012
5	SR 72/Del Laws Road intersection	TBD			X		Final design restarted in 2012
6	US 40/Eden Square intersection	2000					
7	US 40/Buckley Boulevard intersection	2000					
8	SR 1/Newtown Road interchange	< N / A >					Project dropped from Plan
9	Church Road, US 40 to Wynnefield	2004					
10	SR 7, US 40 to Newtown Road	2006					
11	SR 7, Newtown Road to SR 273	2014					Construction began in March 2012
							Project delayed to Phase II or Phase III - Working with developers to
12	Reybold Road, SR 72 to Salem Church Road	TBD		X			construct portion of improvements
13	Eden Square Connector	TBD					Final design complete, project on-hold
14	Rue Madora US 40 sidepaths, SR 72 to Scotland Drive	2002	**	-			T 1 1 7 21
15	US 40 sidepaths, SR 72 to Scotland Drive	TBD	X				To be built with corresponding roadway segments
16	US 40 sidepaths, Scotland Drive to Salem Church Road	TBD	X				To be built with corresponding roadway segments
17	US 40 sidepaths, Salem Church Road to Church Road	TBD	X				To be built with corresponding roadway segments
18	US 40 sidepaths, Church Road to Walther Road	TBD	X				To be built with corresponding roadway segments - some sections completed by developers
		2005	A				Essentially complete - built by private developer
19 6	US 40 sidepaths, Governors Square to SR 1	TBD	X				To be built with corresponding roadway segments
		TBD	X	-			Subject to results of Old Baltimore Pike study (#39)
21 8	SR 72 sidewalks, US 40 to SR 71	TBD	X				Project delayed to Phase II or Phase III
23 I ESE	Sit 12 side wants, e.s. to to sit 11	100					1 To jest delayed to 1 habe 11 of 1 habe 11
23   🕏	Walther Road sidewalks, US 40 to Old Baltimore Pike	2008					
24 E	Porter Road bike lanes, SR 896 to US 40	2002					
25	Wilton Boulevard and Appleby Road sidewalks	2006					
26	Songsmith Drive sidewalks	2003					
27	Short-term improvements project	2000					
28	Enhancements to current transit service	2001					
29	Route deviation service along US 40	TBD					
30	Additional pedestrian connections to transit	2009					Part of bus stop improvements project (#31)
31	Additional bus stop improvements	2009					
32	December and assessing of and and aids assessing	TBD					Desired deleased to Dhane II on Dhane III
33	Preservation and expansion of park and ride capacity  Waterford pedestrian access to US 40 bus stop	2003					Project delayed to Phase II or Phase III
34	Access management on selected developed properties	< N / A >	X				Ongoing effort of site review team
35	Access management on properties as they are developed	< N / A >	X				Ongoing effort of site review team
36	Landscaping, streetscaping, and signing along US 40	TBD			X		Guide signs only - project delayed to Phase II or Phase III
27	Pleasant Valley Road/Frazer Road realignment study	2000					Realignment not recommended
37 38	Newtown Road transportation corridor	2000		-			
39	Old Baltimore Pike, SR 72 to SR 273	TBD		-			Newtown Trail to be built (#81)
40	Glasgow Avenue "Main Street"	TBD		-			Project delayed to Phase II or Phase III  Project delayed to Phase II or Phase III
41	US 13 corridor study, SR 1 to Wilmington	TBD		+			Project delayed to Phase II or Phase III
42	SR 72 corridor study, US 40 to SR 1	2002		1			Implementation strategy not yet determined
43	SR 71 corridor study, SR 896 to US 13	TBD		<del> </del>			Project delayed to Phase II or Phase III

						Stat	us	
	يو ا		Actual/		Concept			
No.	Phase	Project	scheduled completion	Under study	design complete	In final design	Under construction	Remarks
44	_	US 40/Walther Road intersection (long term)	2005	study	complete	design	Under construction	Part of widening project (#45) - advanced from Phase II
45		US 40, Walther Road to Governors Square	2005					Built by private developer - advanced from Phase II
46	巨	Scotland Drive extension to Porter Road	2004					Built by private developer - advanced from Phase III
47	PHASE	Bear Area Pedestrian Improvements	2008					New project requested by Corridor Monitoring Committee
77	₹	Dear received improvements	2000					rew project requested by corridor infolinoring committee
48		School Bell Road sidewalks/bike lanes	2008					Advanced from Phase II - Construction completed in October 2008
49		US 40/Pleasant Valley Road intersection	TBD	X				
50		US 40/Salem Church Road/Porter Road intersection	TBD	X				Part of US 40 environmental assessment
51	1	US 40/SR 1 southbound ramp intersection	TBD	X				Part of US 40 environmental assessment
52	-	US 40, SR 72 to Scotland Drive	TBD	X				Part of US 40 environmental assessment
53	1	US 40, Church Road to Walther Road	TBD	X				Part of US 40 environmental assessment
54	1	US 40/SR 896 interchange	TBD	X				Part of US 40 environmental assessment
55	1	US 40/SR 7 interchange	TBD	X				Part of US 40 environmental assessment
56	П 2008-2013	Old Porter Road, Porter Road to SR 71	TBD		X			Curve realignment to be built by private developer - Intersection improvements at SR 71 will be constructed under separate design contract. DeIDOT negotiating additional widening improvements to be completed by developers
57	8	US 40 sidepaths, SR 896 to SR 72	TBD	X				To be built with corresponding roadway segments
58	17	US 13 sidepaths, US 40 to Tybouts Corner	TBD					
59	PHASE 1	SR 896 sidepaths, Porter Road to Old Baltimore PIke	TBD					
60	"	Salem Church Road sidewalks/bike lanes, US 40 to I-95	TBD					
61	1	Del Laws Road sidewalks	TBD					
	1	Old County Road sidewalks, Frazer Road to Glasgow						
62		Avenue	TBD	X				Corridor study completed in 2005
63		Preservation and expansion of park and ride capacity (continued)		X				Ongoing effort
- 05	1	Access management on selected developed properties						Ongoing crioit
64		(continued)						Ongoing effort
65		Closure of all median openings that are not or will not be signalized						Ongoing effort of site review team and safety committee
66		US 40/Scotland Drive intersection	TBD	X				Part of US 40 environmental assessment
67		US 40/SR 1 northbound ramp intersection	TBD	X				Part of US 40 environmental assessment
68		US 40/Glasgow Avenue intersection	TBD	X				Part of Glasgow Avenue study (#40)
69		US 40, Scotland Drive to Salem Church Road	TBD	X				Part of US 40 environmental assessment
70		US 40, Salem Church Road to Church Road	TBD	X				Part of US 40 environmental assessment
71	ล	US 40, SR 896 to SR 72	TBD	X				Part of US 40 environmental assessment
72	-2020	US 40/US 13 interchange	TBD					
73	2014	US 40 overpass at Norfolk Southern	TBD	X				Shellpot Bridge has reduced rail traffic at this location
74		SR 7, SR 71 to US 40	TBD					
75	H	SR 72, US 40 to Reybold Road	TBD					
76	S	Church Road, Wynnefield to SR 71	TBD	X				Concept design underway
77	PHASE	Glasgow circulator roadways	TBD					
78		US 40 sidepaths, Maryland line to SR 896	TBD	X				Concept design underway - some segments constructed by developers
79		US 40 sidepaths, SR 1 to US 13	TBD					
80		Closure of all median openings that are not or will not be signalized (cont'd)						Ongoing effort of site review team and safety committee - Beck Woods signal design complete, awaiting developer funding
81	]	Newtown Trail, Salem Church Road to SR 7	TBD			X		Project on hold

